



# C4I Evolutionary Trends

Presentation to  
Ninth Annual  
Special Operations/Low Intensity Conflict  
(SO/LIC)  
Symposium and Exhibition

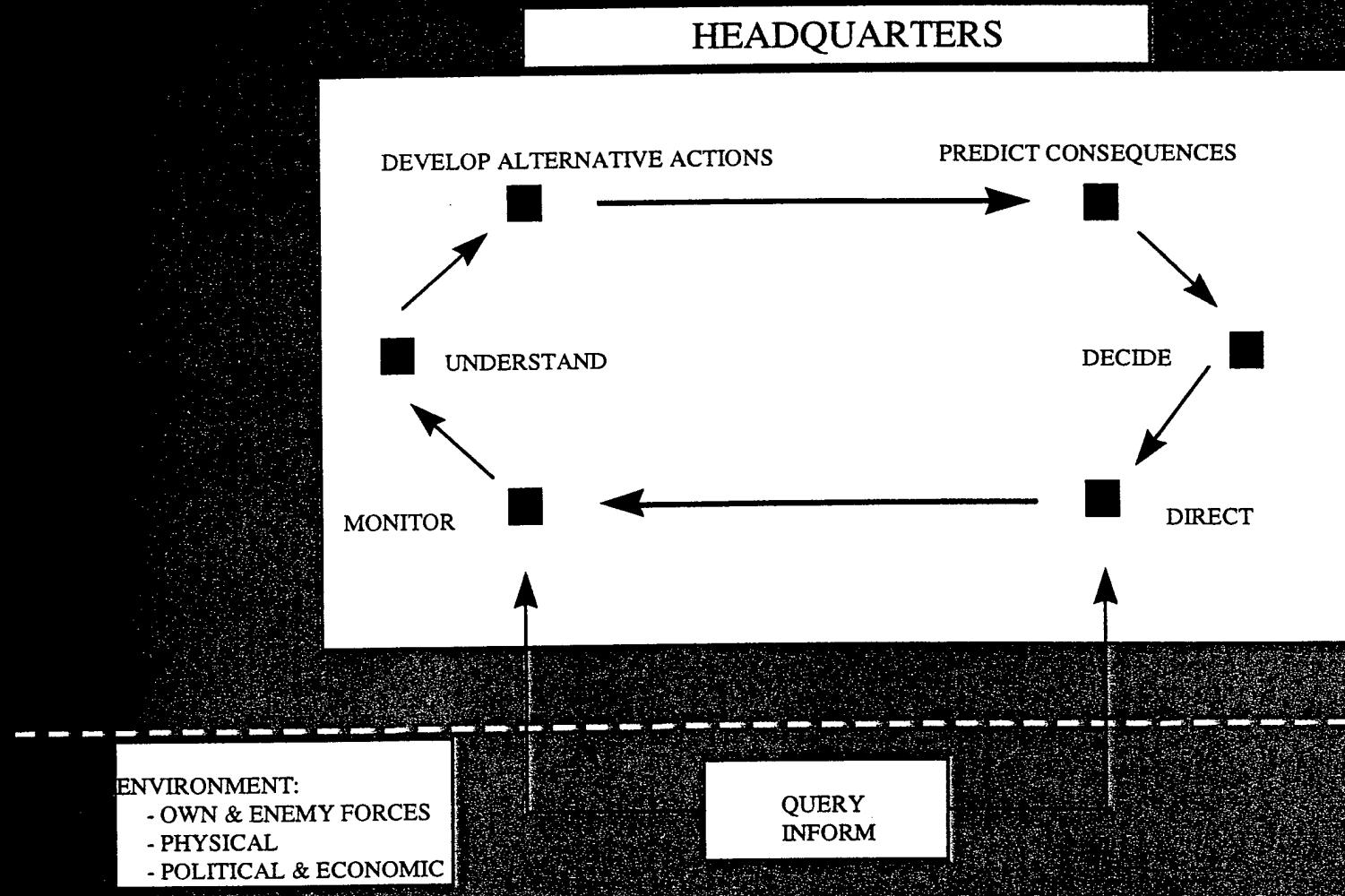
Presented by  
**RADM Gary Wheatley USN (Ret.)**  
Evidence Based Research, Inc.

02/18/98

Evidence Based Research, Inc.  
1595 Spring Hill Road, Suite 250  
Vienna, Virginia 22182-2228  
(703) 893-6800  
[ebriinc@ebriinc.com](mailto:ebriinc@ebriinc.com)



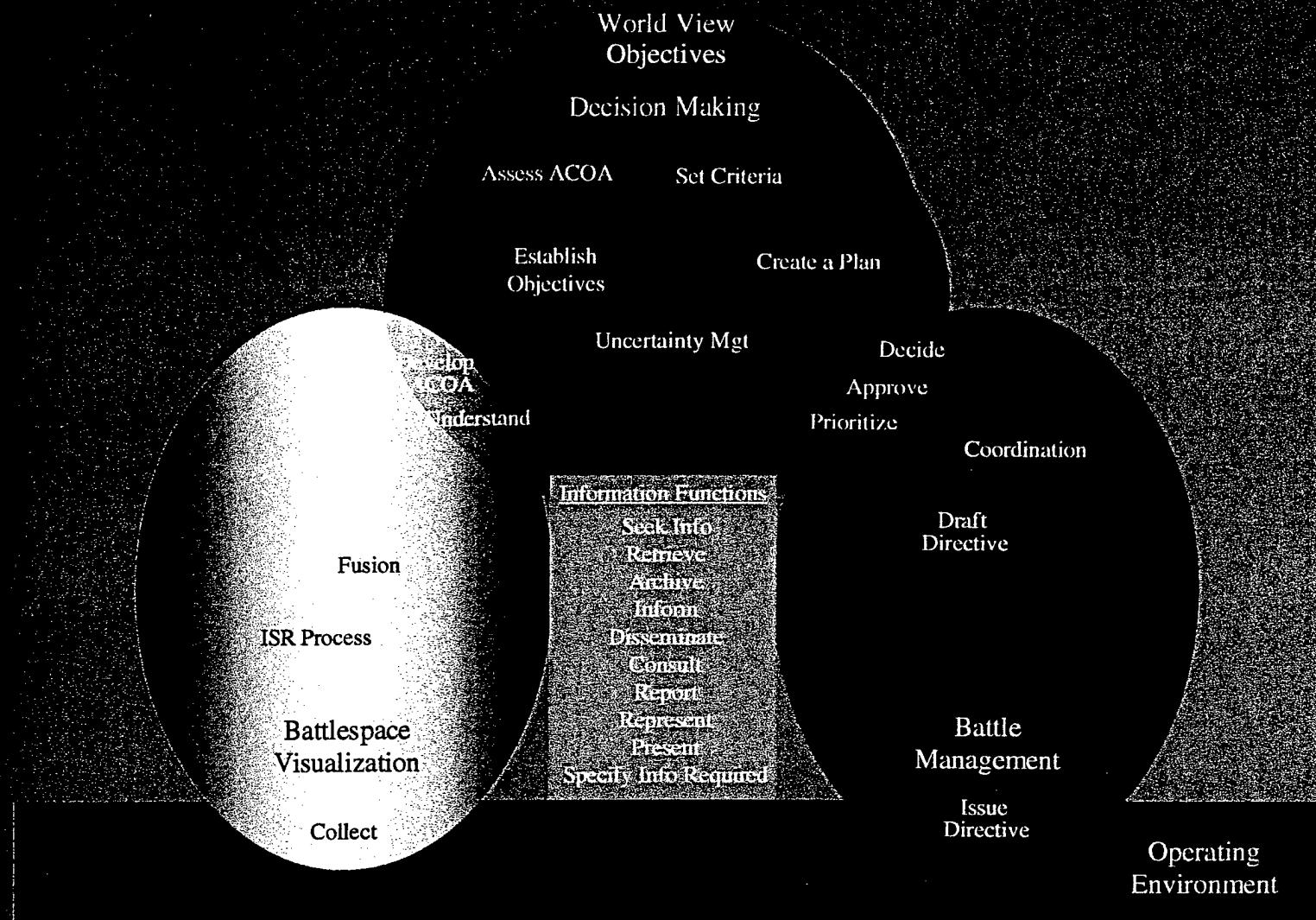
# Basic Command and Control Cycle



Evidence Based Research, Inc.  
1595 Spring Hill Road, Suite 250  
Vienna, Virginia 22182-2228  
(703) 893-6800  
[ebriinc@ebriinc.com](mailto:ebriinc@ebriinc.com)



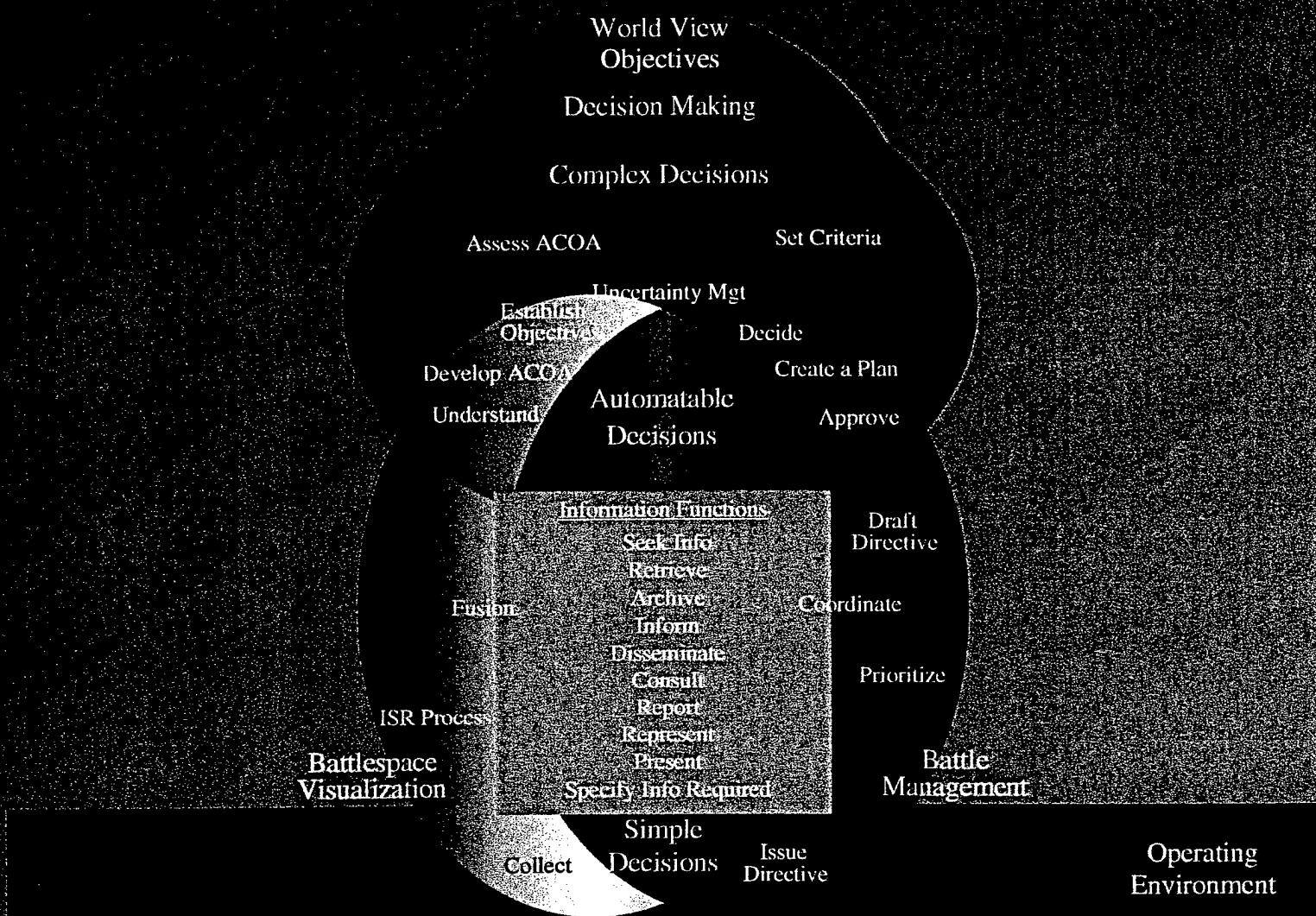
# Generic Functional C2 Processes



Evidence Based Research, Inc.  
1595 Spring Hill Road, Suite 250  
Vienna, Virginia 22182-2228  
(703) 893-6800  
[ebriinc@ebriinc.com](mailto:ebriinc@ebriinc.com)



# Increased Integration & Simultaneity



Evidence Based Research, Inc.  
1595 Spring Hill Road, Suite 250  
Vienna, Virginia 22182-2228  
(703) 893-6800  
ebrinc@ebrinc.com



# What's Different?

- Better Battlespace Visualization
- Information Enabled Organizations
- Adaptive Decision Making
- Agile Battle Management
- Significant Increase in Force Effectiveness and Efficiency



# Better Battlespace Visualization

- More complete, current and consistent
- More comprehensible
- Flexible retrieval and presentation (pan, zoom, associate)
- Future explicitly considered
- More explicit management of uncertainty



# Information Enabled Organizations

- Virtual teams
- More integrated across function, level of command, and time
- More agile organizations
- More distributed information and processes
- Improved organizational learning

02/18/98

Evidence-Based Research, Inc.  
1595 Spring Hill Road, Suite 250  
Vienna, Virginia 22182-2228  
(703) 893-6800  
[ebriinc@ebriinc.com](mailto:ebriinc@ebriinc.com)



# Adaptive Decision Making

- Context driven decision processes
- Imbedded, predictive decision support
- Rapid plan/re-plan capability
- Contingency rich COA analyses and plans

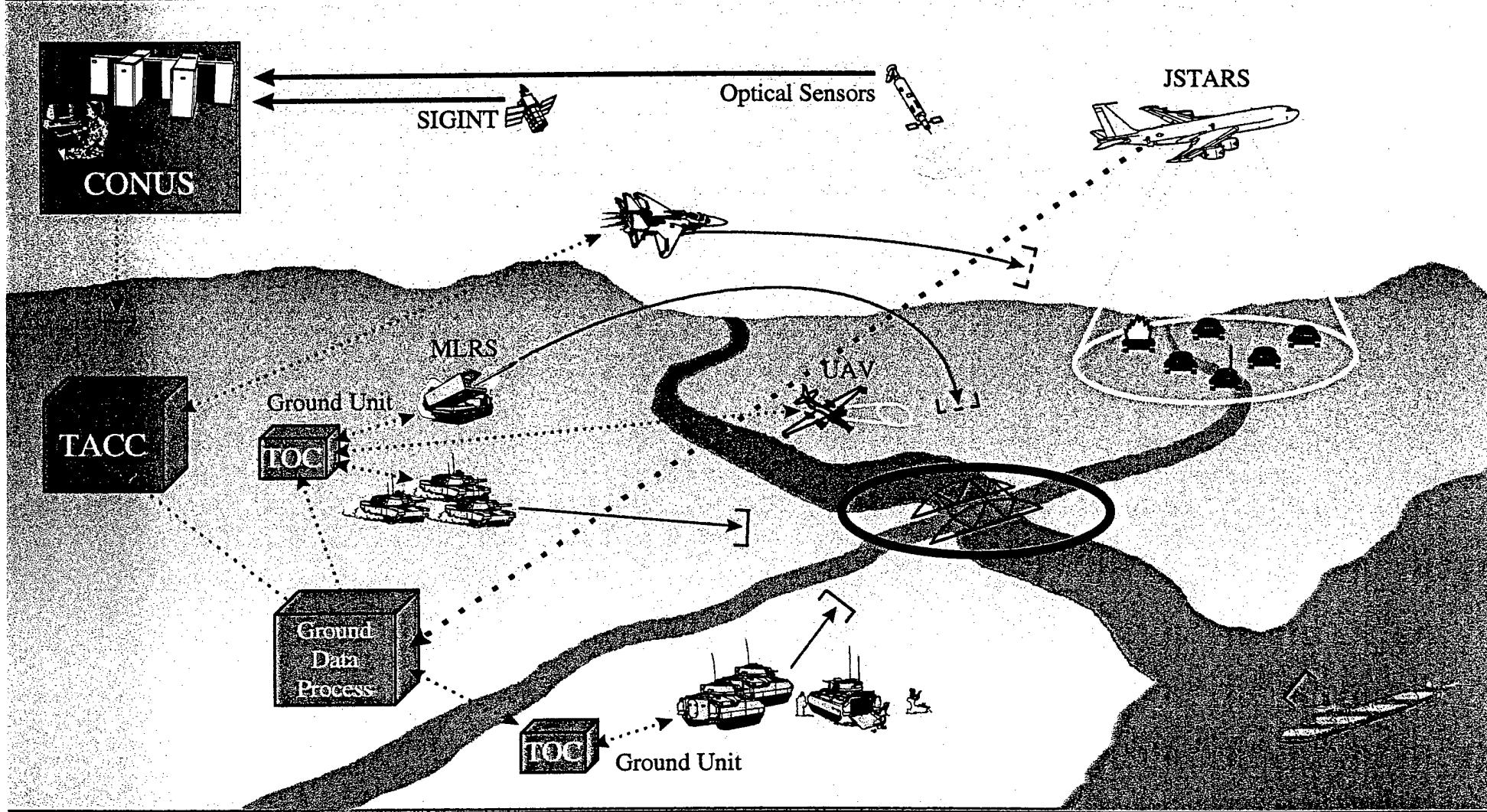
02/18/98

Evidence-Based Research, Inc.  
1595 Spring Hill Road, Suite 250  
Vienna, Virginia 22182-2228  
(703) 893-6800  
[ebriinc@ebriinc.com](mailto:ebriinc@ebriinc.com)



# Increases in Effectiveness and Efficiency

- Seize and maintain the initiative
  - Shape the battlespace
  - Phase the campaign
  - Control the pace of the battle
- Kill the right targets
  - Less lethal battle space and less collateral damage
  - Shorter duration
  - Increased adversary “Shock and Awe”
- Concentration of fires replaces concentration of mass
- More efficient use of communications and logistics systems
- Traditional battle outcome measures (e.g. kill to loss ratios, territory conquered, mission accomplishment)



← Primary Info Link

← Single String Info Link

[ ] Possibly Available

← JSTARS Data

← Weapons Employment

[ ] Too Late for Tactical

